

AUTOMATIC/MANUAL LONGITUDINAL POSITION TRANSLATOR AND ROTARY DRIVE SYSTEM FOR CATHETERS

ABSTRACT OF THE DISCLOSURE

An automatic pullback catheter system (2) includes a
5 disposable catheter assembly (6) mountable to a drive assembly
(4). The drive assembly includes a body (8) to which a drive
chassis (14) is mounted for movement along a longitudinal path
(16) by a motor (20) which rotates a longitudinal drive screw
(22) selectively coupled to the drive chassis by a threaded
10 clamp (24). A rotary drive motor (30), mounted to the drive
chassis, rotates a first combined connector (34). The
catheter assembly includes a hollow sheath (38) housing a
rotatable and axially movable cable assembly (44). The sheath
includes a proximal hub (42) mountable to the body. The cable
15 assembly includes an elongate imaging cable (46) with a second
combined connector (36) at its proximal end. The first and
second combined connectors are blind matable connectors and
provide for the longitudinal movement coupling, the rotary
movement coupling and the data/information connection of the
20 two connectors.